§23.1547 Magnetic direction indicator.

- (a) A placard meeting the requirements of this section must be installed on or near the magnetic direction indicator.
- (b) The placard must show the calibration of the instrument in level flight with the engines operating.
- (c) The placard must state whether the calibration was made with radio receivers on or off.
- (d) Each calibration reading must be in terms of magnetic headings in not more than 30 degree increments.
- (e) If a magnetic nonstabilized direction indicator can have a deviation of more than 10 degrees caused by the operation of electrical equipment, the placard must state which electrical loads, or combination of loads, would cause a deviation of more than 10 degrees when turned on.

[Doc. No. 4080, 29 FR 17955, Dec. 18, 1964; 30 FR 258, Jan. 9, 1965, as amended by Amdt. 23–20, 42 FR 36969, July 18, 1977]

§ 23.1549 Powerplant and auxiliary power unit instruments.

For each required powerplant and auxiliary power unit instrument, as appropriate to the type of instruments—

- (a) Each maximum and, if applicable, minimum safe operating limit must be marked with a red radial or a red line;
- (b) Each normal operating range must be marked with a green arc or green line, not extending beyond the maximum and minimum safe limits;
- (c) Each takeoff and precautionary range must be marked with a yellow arc or a yellow line; and
- (d) Each engine, auxiliary power unit, or propeller range that is restricted because of excessive vibration stresses must be marked with red arcs or red lines.

[Amdt. 23–12, 41 FR 55466, Dec. 20, 1976, as amended by Amdt. 23–28, 47 FR 13315, Mar. 29, 1982; Amdt. 23–45, 58 FR 42166, Aug. 6, 1993]

§23.1551 Oil quantity indicator.

Each oil quantity indicator must be marked in sufficient increments to indicate readily and accurately the quantity of oil

§23.1553 Fuel quantity indicator.

A red radial line must be marked on each indicator at the calibrated zero reading, as specified in §23.1337(b)(1).

[Doc. No. 27807, 61 FR 5193, Feb. 9, 1996]

§23.1555 Control markings.

- (a) Each cockpit control, other than primary flight controls and simple push button type starter switches, must be plainly marked as to its function and method of operation.
- (b) Each secondary control must be suitably marked.
 - (c) For powerplant fuel controls—
- (1) Each fuel tank selector control must be marked to indicate the position corresponding to each tank and to each existing cross feed position;
- (2) If safe operation requires the use of any tanks in a specific sequence, that sequence must be marked on or near the selector for those tanks;
- (3) The conditions under which the full amount of usable fuel in any restricted usage fuel tank can safely be used must be stated on a placard adjacent to the selector valve for that tank; and
- (4) Each valve control for any engine of a multiengine airplane must be marked to indicate the position corresponding to each engine controlled.
- (d) Usable fuel capacity must be marked as follows:
- (1) For fuel systems having no selector controls, the usable fuel capacity of the system must be indicated at the fuel quantity indicator.
- (2) For fuel systems having selector controls, the usable fuel capacity available at each selector control position must be indicated near the selector control.
- (3) For fuel systems having a calibrated fuel quantity indication system complying with §23.1337(b)(1) and accurately displaying the actual quantity of usable fuel in each selectable tank, no fuel capacity placards outside of the fuel quantity indicator are required.
- (e) For accessory, auxiliary, and emergency controls—
- (1) If retractable landing gear is used, the indicator required by §23.729 must be marked so that the pilot can, at any time, ascertain that the wheels are secured in the extreme positions; and